

## THAT WHICH IS CLAIMED:

4. An arrangement for measuring properties of a moving paper web having  
5 a predetermined width, which arrangement comprises:  
measuring means for measuring properties of a paper web, and  
an <sup>UNMOVING</sup> plane-like support surface for supporting the paper web in connection with  
the measuring means, the plane-like support surface extending substantially over the  
whole width of the paper web in the cross-direction relative to the direction of travel of  
10 the paper web and defining at least one opening therein,  
the measuring means being arranged to measure properties of the paper web  
through the plane-like support surface through the opening.

2. An arrangement according to claim 1, wherein said at least one opening  
15 forms at least in part an opening arrangement, and wherein the opening arrangement is  
arranged to extend substantially over the whole width of the paper web in the cross-  
direction relative to the direction of travel of the paper web.

3. An arrangement according to claim 2, wherein at least one opening ex-  
20 tends substantially over the whole width of the paper web.

4. An arrangement according to claim 1, wherein the opening has a trans-  
parent cover.

25 5. An arrangement according to claim 1, wherein the support surface is ar-  
ranged in such a way that the paper web is substantially not in contact with the support  
surface.

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6. An arrangement according to claim 5, wherein the plane-like support surface is at least partly curved in such a way that the air brought along by the paper web forms an air layer between the paper web and the plane-like support surface.

5 7. An arrangement according to claim 6, wherein the plane-like support surface is provided with pressure-measuring holes, and that the arrangement comprises means for measuring the pressure in the air layer for the purpose of defining the tension of the paper web.

10 8. An arrangement according to claim 1, wherein in connection with the plane-like support surface, air blow means are arranged for blowing air between the plane-like support surface and the paper web.

15 9. An arrangement according to claim 1, wherein the plane-like support surface is provided with at least one measuring hole for single measurements.

10. An arrangement according to claim 9, wherein in connection with the measuring hole, means are arranged for measuring the temperature of the paper web in the vicinity of the paper web.

20 11. An arrangement according to claim 1, wherein the measuring means comprise at least one measuring transmitter and at least one measuring receiver.

12. An arrangement according to claim 1, wherein the measuring means are arranged to measure properties of the paper web by means of transmission measurement.

13. An arrangement according to claim 1, wherein at least one measuring means is arranged to be moved back and forth in the cross-direction relative to the direction of travel of the paper web.

14. An arrangement according to claim 1, wherein the plane-like support surface is provided with at least two openings successively in the direction of travel of the paper web.

5 15. An arrangement according to claim 14, wherein in connection with each opening, measuring means are arranged.